

## DEMOGRAPHIC AND SOCIAL CHANGES IN SUBURBS OF KLAIPĖDA IN 2010–2017

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### ABSTRACT

Klaipėda is the third largest city in Lithuania, but its population is decreasing, while its suburbs are expanding and growing. This study reveals population migration to Klaipėda suburbs at the level of the smallest administrative unit – elderships. This helps with sufficient precision to identify not only the most attractive suburban residential areas, but also to determine the social-demographic problems faced by the local population. Due to uneven population change and structure, there is already a shortage of educational institutions and educators in some elderships. In the remote elderships from Klaipėda city, the population is rapidly aging, the unemployment rate is relatively higher than in other elderships, and the connection with the Klaipėda city by public transport is insufficient. Proposals for administrations of elderships and district municipalities are formulated taking into account the trends of population change. Comparative analysis, cartographic analysis, document analysis, expert interview method and others were applied in this study.

KEYWORDS: *suburbs, eldership, Klaipėda, demographic and social changes.*

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### Introduction

According to the data of Statistics Lithuania, during the period of 2010–2018 the population of Lithuania decreased by 883 thousand or even by 24%. Demographic situation in Lithuania is getting worse: the birth rate is declining, the aging process is accelerating, and some young people of working age are emigrating. Population changes are noticeable in all municipalities of Lithuania, but the rate of decrease is greater in urban than in rural areas. Only Vilnius city population is growing intensively. Part of the population is “discovering” areas outside cities that are in many ways more attractive to life. The inhabitants of these territories work in the city and use the city infrastructure.

Klaipėda plays an increasingly important role of the metropolitan centre in the western part of Lithuania, but the area of noticeable influence is not large. It is likely that the influence is limited to commuting area (Shor, 2017: 51). Klaipėda is the third largest city in Lithuania, but its population is decreasing, while its suburbs are expanding and growing. Rising economic levels give people financial stability. Residents have the opportunity to choose their desired place of residence that meets their expectations and financial opportunities. For suburban

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residents, the city remains one of the main sources of attraction, with workplaces, social, medical and other service centres. Daily travel between suburban and city generates traffic flows, congestion and air pollution. As suburbs expand, the level of automation naturally increases. Own car remains the most popular mode of transport as public transport is not yet able to meet the daily mobility of the population. Thus, the inhabitants of the expanding suburban area live in a quiet, clean environment and enjoy the city infrastructure every day.

The object of the research – Klaipėda suburbs.

The purpose of the research is to investigate demographic and social changes in Klaipėda suburbs and their territorial specificity in 2010–2017.

In order to achieve this aim the following tasks were formulated:

1. To investigate the population change of Klaipėda suburbs in 2010–2017 and its causes.
2. To analyse territorial manifestation of social problems in Klaipėda suburbs 2010–2017.
3. To make proposals to the district municipal administration to reduce demographic and social problems in the suburbs of Klaipėda.

This study reveals population migration to suburbs at the level of the smallest administrative units (elderships). This helps with sufficient precision to identify not only the most attractive suburban residential areas, but also to determine the social-demographic problems faced by the local population.

**Methods.** Various *statistics* reflecting population change and individual factors of this change are used. Lack of data is the biggest and most critical issue in this study. The collection of internal migration data by elderships or individual settlements is particularly difficult. At this stage, statistical data have been processed, aggregated, grouped and calculated changes in 2010–2017. Using the method of *comparative analysis*, the elderships were compared with each other, as well as the indicators of Klaipėda city and Lithuania. The *documents* of the selected elderships and municipalities were analysed: their activity regulations, strategic plans and annual reports of municipalities, social service plans of districts, the Integrated Territorial Development Program of the city, etc. *Cartographic analysis* is also required – maps were created using the ArcGIS (Geographic Information System) database. In this case the subdivision layer (seniunijos.shp) was used. This method is chosen as a way to visualize the size of the territory and analysed phenomena. Using the *expert interview method*, the administrative leaders of 13 elderships were interviewed. There was also communication and gathering of information from other specialists (experts): the staff of the civil registration and archives departments, the directors of the health bureau, the vice-mayor of Klaipėda district, specialists of the Employment Service and so on.

The elderships, located 25 km from Klaipėda city centre, were selected for the study. This is the distance where commuting is most intense. However, several more remote (more than 25 kilometres from the city of Klaipėda) elderships also are included in order to compare the social demographic differences. The study was carried out in 13 elderships of Klaipėda and Kretinga district municipalities.

## 1. Theoretical overview

The “moving” between the city and its periphery has always taken place. Rural migration has changed cities, and they have been growing. Thus, as the population of cities increases, the process of urbanization takes place. Urbanization is the growth of cities and their population; the spread of urban lifestyles to nearby and increasingly remote areas; the increasing role of cities in public life; the prevalence of diversity of settlement forms (McGranahan et al., 2014; Juškevičius, 2003). Production and work activities are the principal drivers of urban development and growth (Robinson, 2016: 22).

Population change is driven by two interrelated elements – natural change and net migration (Ubarevičienė, 2016). In many countries, on the one hand, it is a positive social change, the result of early death control. The relationship between young and old populations makes it necessary to revise and adapt existing societal resources to the new needs of the economy (access to the labour market, income level), politics (power in political and public organizations), social security, health development, human ecology (housing needs, environment, settlement infrastructure, communication, etc.) and others (Kaminskienė, 2006). Cities in Central and Eastern

Europe in particular are facing this demographic, as well as urban, problem of aging. One of the major challenges for future development is the consequences of demographic change (Steinfuhrer et al., 2016).

At the beginning of the 21st century, more than half of the world's population lives in cities, while in Europe, more than 70% of the population lives in cities (Kabisch et al., 2009; Nabielek et al., 2016). At the Habitat II Conference in Istanbul in 1996, it was stated that the problems of settlements did not diminish, that they remained the same and that new ones emerged as a result of the development of the urbanization process and the globalization of economic and other activities (Juškevičius, 2003).

Urbanization in Lithuania was most rapid in 1960–1990, when the model of sustainable and controlled urbanization was implemented: five relatively weak regional centres were rapidly developing, which had to close the gap with the five traditional metropolitan areas of the country (Juškevičius, 2013). During this period there was an internal migration of rural population to cities (Aleksavičius, 2007). Despite the general population decline in Lithuania since 1990, the concentration of population has increased around major cities. After Lithuania's accession to the EU in 2004, the population of cities (on average 30,6 thousand) and of rural areas (16,8 thousand) decreased every year (Statistics Lithuania).

In the mid-twentieth century, advances in communication made it possible for residents to move away from the city; this is how the suburbs begin to grow. Their activities are integrated with urban activities (Cirtautas, 2010). Gradually, suburbanization processes begin to take shape. This is the third phase of urbanization that continues to this day. Two processes determine this – population mortality, which exceeds the birth rate, and active population external emigration (Pocius et al., 2016).

The “suburb” term is described in the Cambridge dictionary as “an area on the edge of a large town or city where people work in the town or city often live” (Cambridge dictionary 2018). In other words, it is a residential area near the city. A suburb is even more precisely defined as a suburban area, an area that is close to the city, without strict and formal boundaries, and whose main feature is the close and significant relationship with the central city (Cirtautas, 2010). This zone is intensively developing. In suburban areas, which are located a short distance from cities, the process of rural urbanization is developing, so that the village is urbanized. The main feature of this process is commuting to the city in daily affairs (work, study, shopping, etc.) (Juškevičius, 2013; 2015; Kaminskienė, 2009; Pocius, 2016; Wittwer et al., 2016).

Not only the suburbs of major cities in Lithuania are expanding, similar trends are also occurring in Europe (Nabielek et al., 2016; Fertner et al., 2015; Ubarevičienė, 2016; Cirtautas, 2014; Burdack et al., 2007).

The process of developing suburban areas is viewed more negatively than positively because of expensive infrastructure, streets, roads, bridges, stops, gas stations, etc. Residents move to areas without adequate infrastructure, people's mobility becomes limited, they lose time and money, they are more likely to face stressful situations, and more pollution is generated (Galinienė, 2013; Lazauskaitė et al., 2015; Chakrabarty, 2001).

Thus, suburbs are perceived differently. They can be perceived both as luxury areas (rich areas) and as poor areas. Suburban neighbourhoods populated by certain racial or ethnic groups are emerging in the world. Ethnic or racial groups in public life separate and form residential areas (Lichter et al., 2009). In the process of segregation, people feel much marginalized (Boschman et al., 2014).

The suburbs of major cities in Lithuania are in the limelight of research of geographers, urbanists, sociologists and other researchers (Vaitekūnas, 2004; Burneika et al., 2015; Dijokienė, 2006; Gedutis, 2013; Lazauskaitė et al., 2015; Mačiukėnaitė, 2012; Pocius et al., 2016; Stanaitis et al., 2010; Ubareviciene, 2016). All these metropolitan settlements are administratively part of municipalities. The suburbs feel the economic and functional influence of adjacent cities because they are 5–15 km from them (Cirtautas, 2014). Thus, the geographical location closer to the city determines population growth and thus the multifunctionality of the settlement (Kriaučiūnas et al., 2014). Unfortunately, there is still a great lack of territorial surveys at the level of smaller administrative units – elderships. Therefore, this research reveals the demographic and social problems that characterize the suburbs of Klaipėda.

## 2. Demographic processes in the suburbs of Klaipėda

According to the Lithuanian Department of Statistics (2018), the population of Klaipėda district is increasing, mainly due to internal migration, when the population of Klaipėda city moves to the suburbs. Thus, the population of Klaipėda city is decreasing and suburban settlements are growing.

Over a period of seventeen years, trends in population growth / decline can be observed. The overall change in population of Klaipėda suburbs (2010/2017) is positive (by 7% growth). The fastest growth (in terms of population) was in Dvilai (7%), Dauparai-Kvietiniai (28%) and Sendvaris (46%) elderships (Fig. 1).

Surveyed elderships are grouped into several groups according to population change: fast increase, medium increase, medium decrease and fast decrease. As an example, we can analyse one of the elderships – Dvilai, where the population was growing. In the three settlements (Lyveriai, Rimkai and Švėpeliai) the population increased by 61–75%. Thus, when analysing sparsely populated settlements, the emergence of any new quarter leads to rapid population growth. Settlements especially grow if allotments (communities of private landowners) are located in them. However, during the 17-year period, the population of eleven settlements in this eldership decreased, and three of them (Kaviai, Gedminai and Jurgiai) lost one third or more of their population.

The village of Gobergiškė (Dauparai-Kvietiniai eldership) is exceptional. Between 2011 and 2018, this village grew from 232 to 866 inhabitants. However, 618 working immigrants registered in Gobergiškė in 2017, most of whom came from Ukraine, were also Belarussians, Kazakhs, and Romanians, who works in logistics company LLC “Vlantana” (registered place Gobergiškė village). Thus, according to statistics, the population of Gobergiškė village grew by 73%. Many migrant workers live in the motel of company, and the rest – in the other side of the highway in the village Dauparai. As the majority of arrivals in the Dauparai-Kvietiniai eldership are men, their number is statistically higher than that of women. In 2017 the number of men was higher than women even 28%.

Sendvaris eldership is the fastest growing (by population) eldership. The change in population during this period was as much as 46%. In the 7 most populous settlements, the population increased by 50–68%. Private quarters are being formed in growing settlements. The eldership is home to young and middle-aged residents as well as young families. This eldership near Klaipėda city is also distinguished by the fact that there were no diminishing settlements in it for seventeen years. Sendvaris eldership is the most densely populated (114,6 inhabitants / km<sup>2</sup>), while the national average in 2017 was 43,3 inhabitants/ km<sup>2</sup>. The average population density is higher in four other elderships closest to Klaipėda city. The most remote elderships have the lowest population density.

Although the number of women in the suburbs is higher by 1.36% than that of men, in 2010–2017 the growth of men was faster (11%) than that of women (10%). The actual number of men and women may differ, as some residents have not declared their place of residence in the area. In order to get a place for a child in kindergarten, one parent often registers in the city of Klaipėda and the other – in their real place of residence. Predicting 5 years in advance, the number of men growth is expected to continue.

Suburbs are inhabited by younger people (25–44 years) comparing with Lithuania and Klaipėda city (Fig. 2). The largest share of the population in Lithuania and Klaipėda city is 45–64 year olds, as well as a larger share of the population over 85 years old than in the suburbs. The suburbs of Klaipėda demographically are young compared to the general indicators of the country and Klaipėda city.

Population analysis by age group is important because it allows for an assessment of the current demographic and social situation of the population. Knowing future trends can prepare you for future challenges. For example, some elderships are now facing shortages of educational institutions due to a sudden increase in the number of children (up to 6 years). Rapidly growing elderships (Dvilai, Dauparai-Kvietiniai, Sendvaris) can be identified as demographically young. They have the largest share of the population aged 25–44. Sendvaris eldership is particularly young, as the share of children under 16 reaches 19%, while in Klaipėda city – 17.5%. The proportion of residents aged 65 and over is not high, especially in Sendvaris (only 9%).

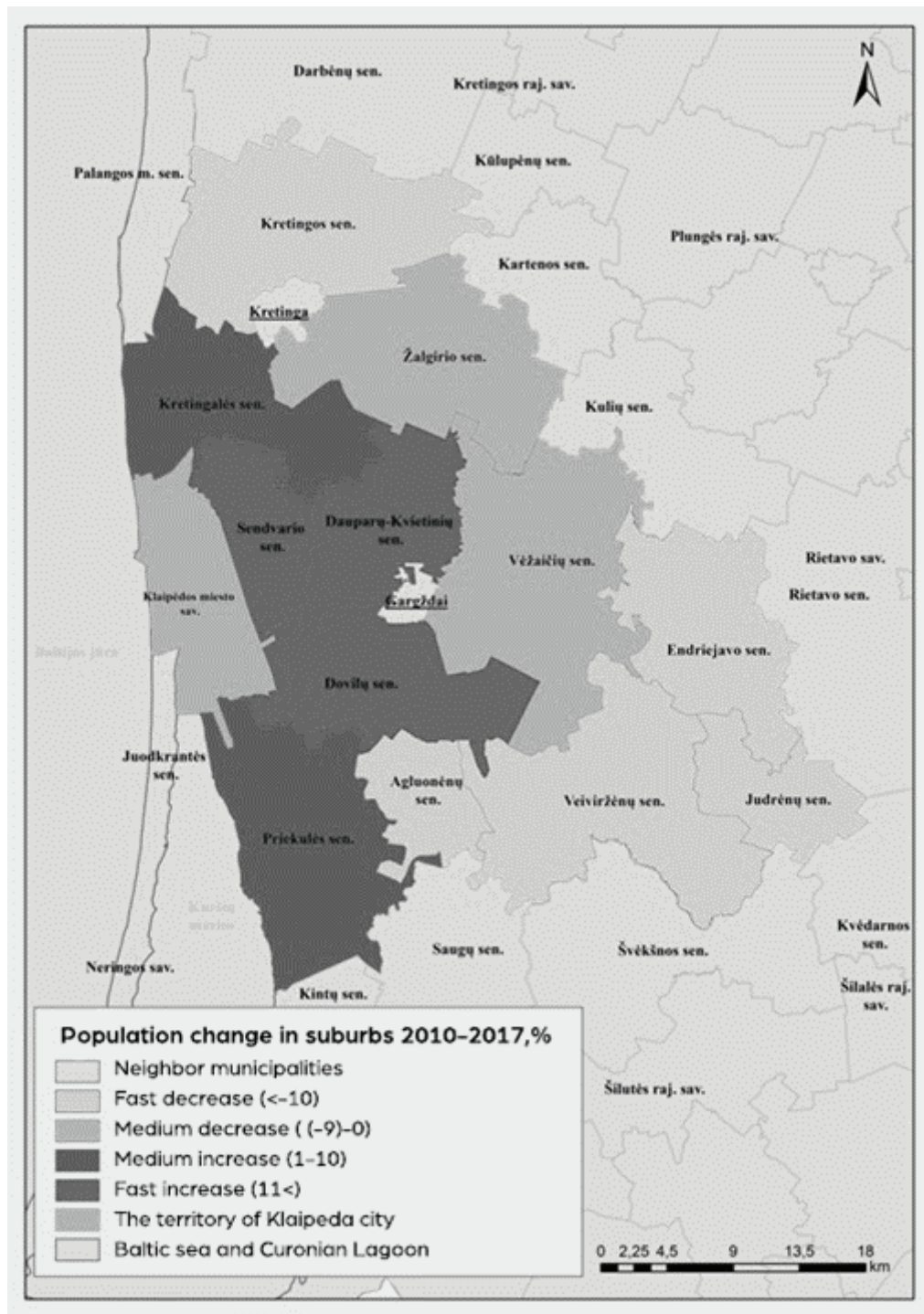


Figure 1. Population change in Klaipėda suburbs in 2010–2017, %

Source: Data of elderships, 2018.

Meanwhile, in many Lithuanian elderships birth rates are balancing at a threshold that does not ensure generational change. 29.6 thousand babies were born in Lithuania in 2017. As the number of people replacing the aging working population is too low, the natural population change in the country is negative.



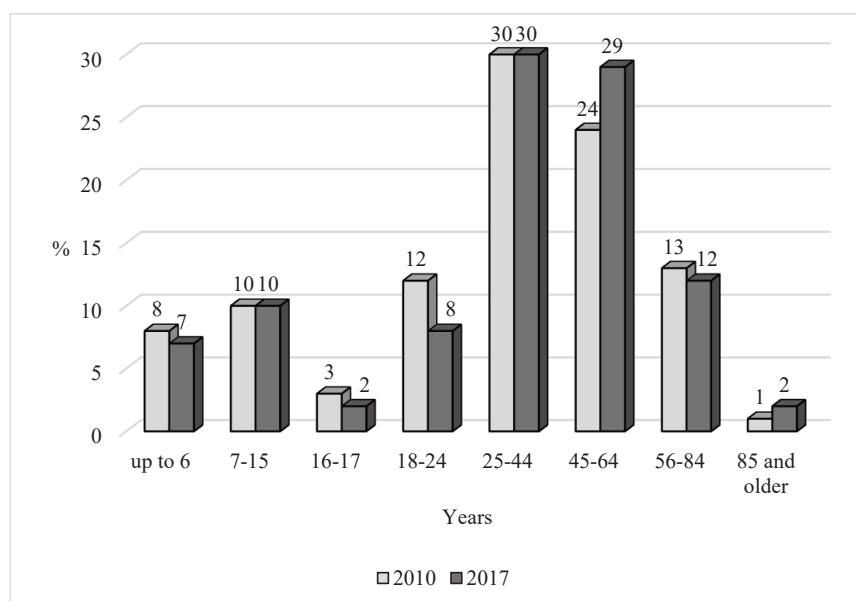


Figure 2. Percentage of population of the elderships surveyed by age groups in 2010 and 2017, %

Source: Eldership information, 2018.

In 2017, 597 children were born and 577 people died in the Klaipėda district, thus the natural population change was positive (22). Meanwhile, the natural population change in Klaipėda city was negative (–323). However, in elderships distant from the Klaipėda city, natural population change is not as favourable. For example, distant elderships (Agluonėnai and Judrėnai), by their standardized mortality rate, are close to the maximum values in EU countries (Fig. 3). In EU countries, the highest standardized mortality rates in 2016 were in Bulgaria (1601), Latvia (1476) and Lithuania – 1454 (Causes of death statistics, 2018).

In the elderships closer to Klaipėda, the average standardized mortality rate is lower than in Lithuania. Major causes of mortality in Klaipėda suburbs are: diseases of circulatory system, malignant neoplasms and external causes of death (Klaipėdos rajono savivaldybės visuomenės..., 2018).

Thus, as the suburbs expand, the number of young families in them is increasing. As a result, the birth rate and the number of children (up to 7 years) is also increasing, and the proportion of the population 65 and older is low, so the natural population change is positive and should remain similar in the future.

Emigration is the main cause of permanent population decline. 699127 people emigrated from Lithuania in 2001–2017 (Demografijos metraštis, 2018). As a result of emigration, the population is aging and the social problems associated with emigration are increasing.

The main reason for emigration is economic motives, i.e. y. relatively low wages, high unemployment, poor economic situation in Lithuania. Many emigrants want to have a better economic and social living conditions. Thus, as the population shrinks, there is a risk of a brain drain. However, it is difficult to accurately estimate the number of people who have emigrated from the elderships, as more than half of all emigrants do not declare their departure. The biggest leap in declared emigration was in 2010, when the Law on Health Insurance of the Republic of Lithuania established obligations for permanent residents to pay compulsory health insurance contributions.

Immigration values per 1000 inhabitants in suburban elderships ranged from 33 to 243.

The most attractive are the elderships located near the Klaipėda city, where the share of arrivals exceeds 200 people per 1000 inhabitants. Relatively few people leave these elderships. Meanwhile, the districts farther from Klaipėda city are less attractive and lose more inhabitants (Fig. 4).

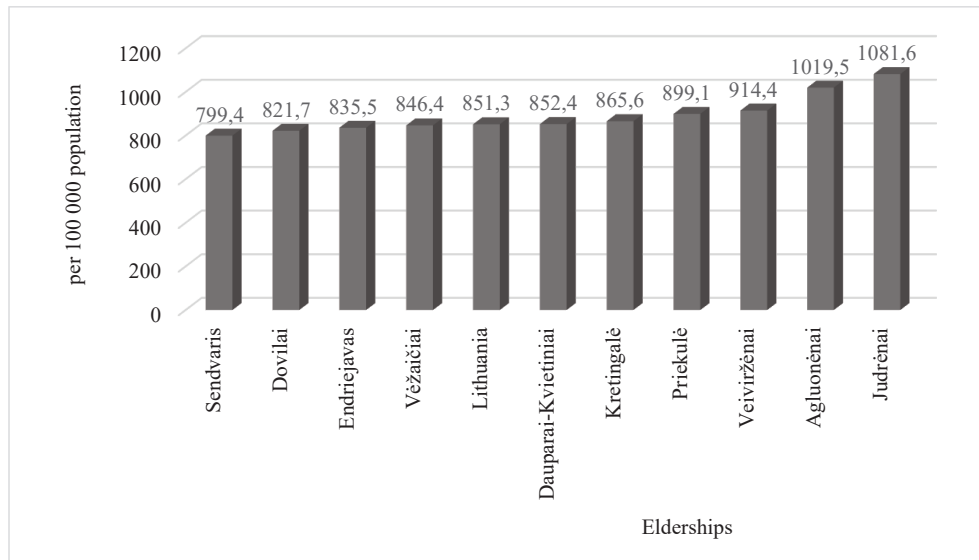


Figure 3. Average standardized mortality rate in elderships in 2010–2014, per 100 000 population

Source: SveNAS – Sveikatos netolygumų atvaizdavimo Sistema, 2017.

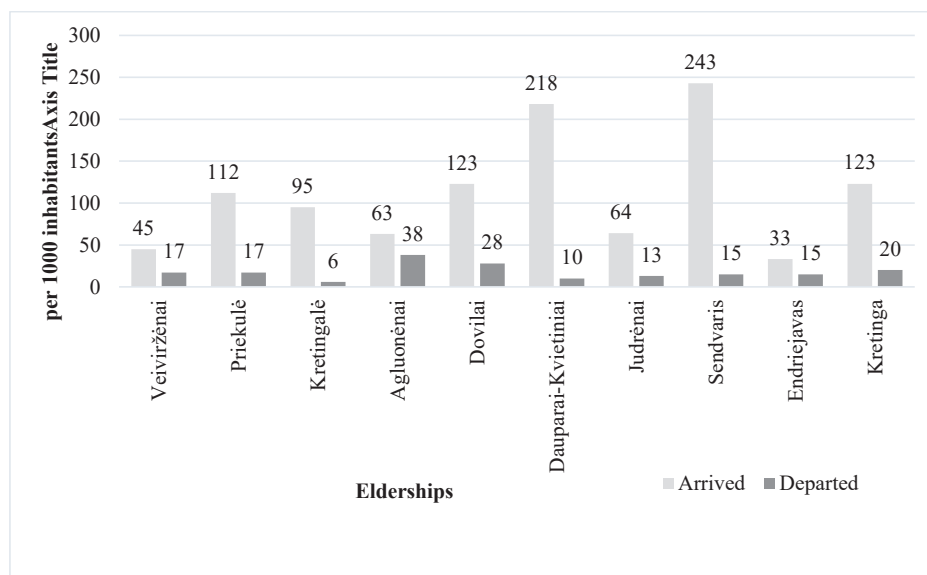


Figure 4. International migration of residents of Klaipėda suburbs by elderships in 2017, per 1000 inhabitants

Source: Eldership statistics, 2018.

Thus, international migration is a very important demographic factor shaping the age structure of the population. Usually young people migrate most intensively, thus accelerating the aging of the population.

### 3. Social changes in Klaipėda suburbs

Demographic, economic and territorial factors influence a variety of social processes in the suburbs and also shape social problems. The following describes the problems related to employment, crime, engineering and social infrastructure development.

#### 3.1. Situation of employment and unemployment rate in Klaipėda suburbs

The concept of employment and unemployment is closely linked to the social sphere. Employment is not only a source of livelihood, it is also the meaning of human life. The most developed industries in Klaipėda district are: building materials, oil extraction, chemical and food industry.

Residents of Klaipėda suburbs have the opportunity to work in their place of residence or in nearby elderships. However, not all residents are able to find jobs that match their desires and qualifications. Unemployment is associated with low income of a person (family), inability to provide basic necessities, difficulties in paying taxes, and lack of health insurance.

The number of unemployed in the analysed elderships is decreasing (except in Sendvaris eldership, where it has grown). In order to estimate the average annual unemployment rate in 2017, elderships are divided into two categories: low and high unemployment. The highest unemployment rate is in Judrėnai eldership which is furthest from Klaipėda city center (8.54%), as well as in closest elderships of Klaipėda: Sendvaris and Priekulė. Although the population of Kretinga eldership is growing rapidly, the unemployment rate is the lowest in the country. The resort summer season at the seaside has a noticeable impact on unemployment in this eldership. Sendvaris and Priekulė elderships are among the fastest growing in terms of population, but their unemployment rate is high (6.72% and 7.13%, respectively) and exceeded the Lithuanian unemployment rate (6.7%) (Fig. 5).

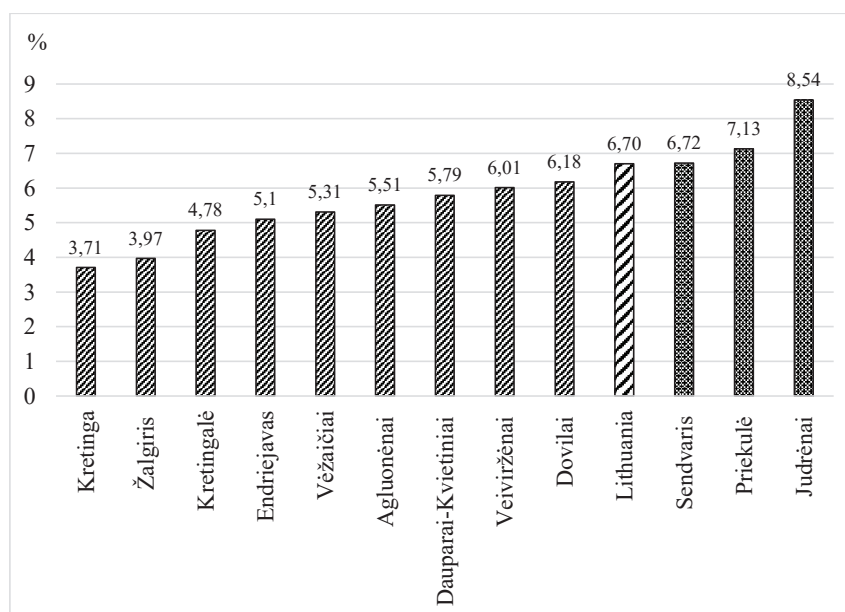


Figure 5. Annual unemployment rate in Klaipėda elderships in 2017, %

Source: Užimtumo tarnyba prie Socialinės apsaugos ir darbo ministerijos, 2018.

There are several reasons for the high unemployment rates in Sendvaris and Priekulė elderships. In Dituva private landowners' community the unemployment rate of the population increases the overall unemployment rate of Priekulė eldership. In many cases, residents with no financial resources to maintain housing in the city move to the Dituva area. Sendvaris eldership is a young, growing eldership. Young families



predominate here and a large part of the population registers their place of residence in Klaipėda. It is not excluded that the dwellings were purchased by returning emigrants who do not yet have official employment in Lithuania. Good geographical location and mobility of jobseekers create the conditions for low registered unemployment in Kretinga eldership. Residents of this eldership also find jobs in the surrounding elderships and Palanga resort (especially during the summer season).

In the general context of decreasing unemployment rate it is recommended that Klaipėda district municipality leaders pay attention to three elderships (Sendvaris, Kretingalė and Judrėnai), to promote employment of the population, reduce unemployment and restore labour market balance.

### 3.2. Crime tendencies in Klaipėda suburbs

As the suburbs of Klaipėda grow and number of population increase, the problem of crime also arises. At the beginning of 2017, a new model of police came into effect, which eliminated the number of inspectors working in elderships. Residential areas are served by groups of police officers. The number of crimes per year in the suburbs is low. They increase episodically as a result of temporary residents living in social risk families. Higher numbers of thefts are recorded at new construction sites. Domestic violence and fraud are most common.

Following the entry into force of a new police model, cooperation between residents, eldership and police has changed. Residents of elderships lack communication with police officers. Now the communication has become much more formal. When people come to the district administration, they do not find a police officer but do not want to use the services of Emergency Response Center.

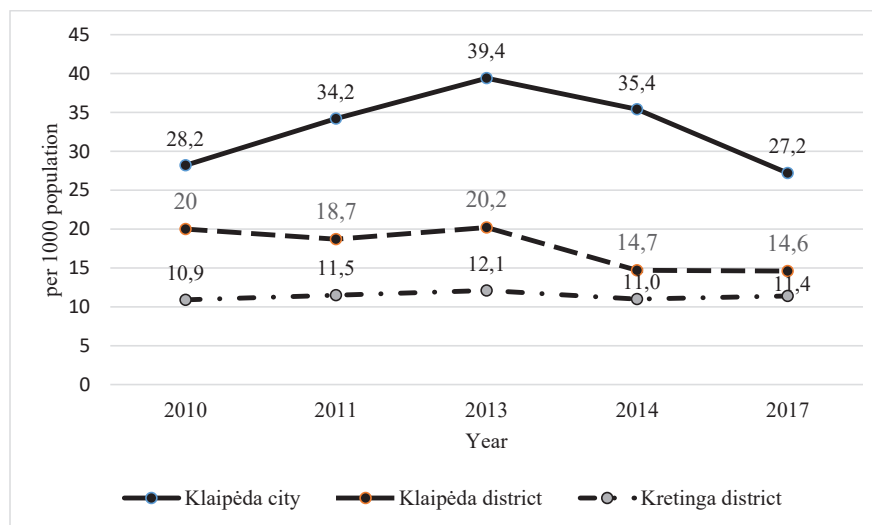


Figure 6. Number of registered criminal offenses in Klaipėda city, Klaipėda district and Kretinga district in 2010–2017, per 1000 population

Source: Informatikos ir ryšių departamentas, 2018.

Since 2010, the number of crimes in Klaipėda district is decreasing, while in Kretinga district it remains constant (Fig. 6). Registered criminal offenses and their investigation rate in Klaipėda city and district are about 40–42%, and in Kretinga district about 50% (Informatikos ir ryšių departamentas..., 2018). Comparing elderships with the rapid population growth, the increase in crime is most noticeable in the Sendvaris eldership. The prevailing crimes are thefts. But as suburbs expand and populations grow, generally the crime rate decreases throughout the area under investigation.

### 3.3. Development problems of engineering and social infrastructure in Klaipėda suburbs

Public transport services in Klaipėda district are provided by 3 main companies. More problems with public transport are in rural areas. Buses do not arrive to some remote villages at all. Often, public transport runs on weekdays, while suburban residents have a need for transport on weekends as well. Residents of Priekulė, Dovilai, Dauparai-Kvietiniai, Judrėnai, Sendvaris and Endriejavas elderships face a lack of public transport. The bus from Klaipėda only goes to some villages twice a day. During school holidays, buses run every other day. Some residents do not drive a car or do not have their own vehicle. New residents living in the suburbs want the same transport as they do in the city. In a large part of elderships (Kretingalė, Endriejavas, Judrėnai, Vėžaičiai) the roads are not asphalted yet, so there is a great need to improve the condition of the roads. There is an underdeveloped pedestrian path network to connect with larger settlements and existing pedestrian paths are in poor condition.

It should be noted that the improvement of engineering infrastructure in the suburbs of Klaipėda is taking place every year. Thanks to the active involvement of residents in the eldership communities, even better results can be achieved, whereas the development and improvement of transport and engineering infrastructure depends to a large extent on political decisions. Therefore, active participation of leaders and community residents in the activities of the eldership can bring the desired results.

Elderships with a share of the retirement age population (aged 65 and over) of 16% and above face social problems and difficulties in accessing health care. Older people are one of the most vulnerable groups in society. “Young” elderships (Sendvaris, Dovilai), where the share of children (under 18) reaches 21%, are already facing an inadequate social infrastructure, such as the lack of kindergartens and schools.

There are 22 kindergartens in the elderships under investigation, but there is no possibility to satisfy all requests for access to kindergartens. Sendvaris eldership is the fastest growing area with many children under the age of 18, so its residents face a shortage of kindergartens. There is one new kindergarten (74 beds) in the village of Slengiai. A private kindergarten is also planned to be built, which could be a salvation for the families of Sendvaris eldership, as the municipality reimburses a fee of 100–150 EUR for attending private kindergartens.

Some elderships (Endriejavas, Priekulė) lack educators or specialists for extra-curricular activities. Thus, when the number of pupils in Lithuania decreases, the number of pupils in the elderships under study increases. As a result, there is a lack of facilities for the education of children and a lack of specialist teachers.

## 4. Ways to reduce demographic and social problems in the suburbs of Klaipėda

The demographic and social analysis of the elderships allows us to make suggestions and recommendations at a later stage.

The study found, that demographically disappearing elderships are Endriejavas, Veiviržėnai and Judrėnai. All of these elderships have a small relative share of children under 15 (13–16%) and a relatively larger proportion of the population over 65 (15–17%). These elderships are the furthest from Klaipėda city. If such demographic trends continue in the future, population of elderships will face social problems such as shortages of medical facilities and educators. Possible proposal for municipal administrations is to diversify economic activities and increase the efficiency of economic activities. This can be achieved by encouraging farmers to invest in agriculture. This would accelerate job creation, attract more residents with families who would need more social infrastructure services (education, medical facilities). The population of Kretinga eldership is growing rapidly and the need for care facilities for elderly people will increase in the future.

Sendvaris eldership is the most densely populated, “young” eldership. Looking at the population size by age group, there is a tendency that the number of children in this eldership should increase. They will need educational facilities. The boundaries of this eldership may change in the near future, as 58.4 percent of local residents in the 2018 voted to connect Slengiai village to the city of Klaipėda. Under national law, the final decision will have to be taken by the Parliament.

Thus, the population and density of elderships may change, but the problem of the lack of social infrastructure will still remain in the future. The proposal is formulated for Klaipėda district municipality to improve social infras-

structure: to allocate funds for the construction of new educational institutions and to reach a consensus with Klaipėda city municipality, so that children can attend educational institutions in Klaipėda city on equal basis. Then all the people who actually live in Sendvaris eldership but are registered in Klaipėda would register again where they live.

The problem of Sendvaris and Priekulė elderships is the high unemployment rate of the population. The suggestion for the municipal administration is to look for ways to attract production to these elderships. This would create jobs and reduce unemployment. Kretingalė eldership is characterized by rapid population growth and low unemployment. The area is densely populated. Thus, the proposal to the municipal administration is to monitor the sufficiency of the social and engineering infrastructure in Kretingalė eldership. The population of Dauparai-Kvietiniai and Dovilai elderships is growing rapidly, the unemployment rate is average, the working-age population is predominant and the proportion of men is higher than that of women. Problems in these elderships are the lack of social and engineering infrastructure facilities. These elderships collect most of the personal income tax. Therefore, as settlements grow, we would suggest improving road quality. Also, the age of the population of Dovilai and Dauparai-Kvietiniai indicates that the majority of young families live there, so the number of children is likely to increase in the future, so the need for educational institutions will only grow.

Thus, the overall assessment of demographic and social changes in the elderships is positive. The population is growing (7%), most of them are of working age, unemployment is below the national level and crime is falling. Disadvantages: negative natural population change, lack of transport, engineering and social infrastructure.

## Conclusions

The population of Klaipėda suburbs is increasing, and in 2010-2017 the number increased by 7%. Sendvaris, Dauparai-Kvietiniai and Dovilai are fastest growing elderships. There is also a positive population change in Priekulė and Kretingalė elderships. All of them are bordered by the territory of Klaipėda city, they are the most attractive areas for the residents due to the short distance from the city and good communication. The number of inhabitants is decreasing rapidly in the districts more distant from Klaipėda.

Factors determining the need for social services include: population aging, disability, emigration, social risk and unemployment. Unemployment rate is highest in Judrėnai eldership, which is furthest from Klaipėda city (8.54%), and low – in Kretinga (3.71%) and Žalgiris (3.97%) elderships. These elderships have the lowest unemployment rate in the country due to good geographical location. It is especially reduced during the summer season. The unemployment rate is high in the Sendvaris (6.72%) and Priekulė (7.13%) elderships. In Priekulė eldership the unemployment rate is raised by the high unemployment rate in Dituva private landowners' community settlement. A large number of residents of Sendvaris eldership are registered in the city of Klaipėda to provide children with a place in educational institutions. Economic activities in Judrėnai, Endriejavas, Veiviržėnai and Kretinga elderships should be diversified and the efficiency of economic activities increased. This can be achieved by encouraging farmers to invest and develop their agricultural activities. As a result, jobs would be created and, as the number of families grew, more social infrastructure and services (education, medicine) would be needed.

Funds for the construction of new educational institutions should be provided in Sendvaris eldership, and a consensus should be reached with administration of Klaipėda city municipality, so that children of the eldership could attend educational institutions in Klaipėda. As the population of Kretingalė, Dauparai-Kvietiniai and Dovilai elderships is growing, the problems of lack of social and engineering infrastructure objects have to be solved.

## References

- Aleknavičius, P. (2007). Kaimiškųjų teritorijų žemės naudojimo problemos. *Žemės ūkio mokslai*, Nr. 1, p. 82–90.
- Boschman, S., Kleinhans, R., Ham, M. (2014). Ethnic differences in realising desires to leave urban neighbourhoods. *IZA Discussion Paper*, No. 8461, p. 2–15. Bonn. <http://ftp.iza.org/dp8461.pdf>.
- Burdack, J., Hesse, M. (2007). Suburbanisation, Suburbia and “Zwischenstadt”: Perspectives of Research and Policy. *German Annual of Spatial Research and Policy. Territorial Cohesion*, Springer, p. 81–100. [https://link.springer.com/chapter/10.1007/978-3-540-71746-1\\_7](https://link.springer.com/chapter/10.1007/978-3-540-71746-1_7).
- Burneika, D., Ubarevičienė, R., Valatka, V. (2015). Socio-economic segregation in growing urban regions of Lithuania. *Filosofija. Sociologija*, T. 26, No. 4, p. 277–292.

- Cambridge Dictionary. Suburb. <https://dictionary.cambridge.org/dictionary/english/suburb>.
- Causes of death statistics. (2018). *Eurostat Statistics Explained*. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Causes\\_of\\_death\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Causes_of_death_statistics).
- Cirkauskas, M. (2010). Šiuolaikinė priemiestinės zonos samprata. *Mokslas – Lietuvos ateitis*, Nr. 3, p. 11–17.
- Cirkauskas, M. (2014). Changing form of the Baltic cities: resurrection of the suburbs. *Our common future in urban morphology*, No. 2, p. 121–132.
- Chakrabarty, B. K. (2001). Urban Management: Concepts, Principles, Techniques and Education. *Cities*, No. 18, p. 331–345.
- Demografijos metraštis 2017. (2018). Lietuvos Statistikos departamentas. Vilnius. <https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=30420>.
- Dijokienė, D. (2006). Vilniaus istorinių priemiesčių genezės, raidos ir vertybių ypatumai. *Urbanistika ir architektūra*, Nr. 2, p. 78–86.
- Fertner, C., Groth, N. B., Herslund, L., Carstensen, T. A. (2015). Small towns resisting urban decay through residential attractiveness. Findings from Denmark. *Geografisk tidsskrift / udgivet af Bestyrelsen for Det Kongelige danske geografiske selskab*, No. 115(2), p. 119–132. <https://www.tandfonline.com/doi/full/10.1080/00167223.2015.1060863?scroll=top&needAccess=true>.
- Galinienė, J. (2013). *Klaipėdos miesto demografinis ekonominis ateities modelis*. Magistro darbas. Klaipėda.
- Gedutis, A. (2013). Klaipėda be žmonių. Mechanistinė miesto samprata. *Academiae artium Vilnensis*, Nr. 71, p. 139–153.
- Informatikos ir ryšių departamentas prie Lietuvos Respublikos vidaus reikalų ministerijos. <https://www.ird.lt/lt/paslaugos/nusikalstamu-veiku-zinybinio-registro-nvzr-paslaugos/ataskaitos-1/nusikalstamumo-ir-ikiteisminių-tyrimu-statistika-1?year=2013&period=1-12&group=203>.
- Juškevičius, P. (2003). *Miestų planavimas*. Mokomoji knyga. Vilnius: Technika.
- Juškevičius, P. (2013). Urbanizacija ir urbanistikos interpretacijos. *Acta Academiae artium Vilnensis*, Nr. 71, p. 13–21.
- Juškevičius, P. (2015). Lietuvos miestų sistemos raida ir jos ateities perspektyvos. *Acta Academiae artium Vilnensis*, Nr. 76, p. 11–34.
- Kabisch, N., Haase, D. (2009). Diversifying European agglomerations: evidence of urban population trends for the 21st century. *Population, space and place*, No. 3, p. 236–253.
- Kaminskienė, R. (2009). *Demografiniai statistiniai rodikliai ir migracijos šrautai*. Išeivijos institutas. [http://www.iseivijosinstitutas.lt/var/uploads/file/1\\_1%20Migracijos%20srautai%202.pdf](http://www.iseivijosinstitutas.lt/var/uploads/file/1_1%20Migracijos%20srautai%202.pdf)
- Kriauciūnas, E., Krupickaitė, D. (2014). Lietuvos kaimo gyvenviečių funkcijų kaitos regioninės ypatybės. *Geografijos metraštis*, Nr. 47, p. 70–87.
- Klaipėdos rajono savivaldybės visuomenės sveikatos stebėsenos 2017 m. ataskaita. (2018). [http://www.visuomenessveikata.lt/images/Klaip%C4%97dos\\_r\\_sav\\_visuomen%C4%97s\\_sveikatos\\_steb%C4%97senos\\_2017\\_m\\_ataskaita.pdf](http://www.visuomenessveikata.lt/images/Klaip%C4%97dos_r_sav_visuomen%C4%97s_sveikatos_steb%C4%97senos_2017_m_ataskaita.pdf).
- Lazauskaitė, D., Šarkienė, E., Skripkienė, R. (2015). The assessment of development scenarios for suburban metropolitan districts under the multiple criteria methods. *Procedia Engineering*, No. 122, p. 19–28.
- Lichter, D. T., Parisi, D., Taquino, C. M., Griceb, S. M. (2009). Residential segregation in new Hispanic destinations: Cities, suburbs, and rural communities compared. *Social science research*, No. 39, p. 215–230. <https://www.sciencedirect.com/science/article/abs/pii/S0049089X09000908>
- Mačiukėnaitė, J. (2012). Sociological research of historical suburbs for their spatial structure modernisation (case of Vilijampolė, Kaunas). *Journal of Young scientists*, No. 2, p. 29–35. [http://www.su.lt/bylos/mokslo\\_leidiniai/jmd/12\\_02\\_35/maciukenaite.pdf](http://www.su.lt/bylos/mokslo_leidiniai/jmd/12_02_35/maciukenaite.pdf).
- McGranahan, G., Satterthwaite, D. (2014). Urbanisation concepts and trends. *Working Paper*. London. <https://pubs.iied.org/pdfs/10709IIED.pdf>
- Nabielek, K., Hamers, D. (2016). *Cities in Europe. Facts and figures on cities and urban areas*. Netherlands Environmental Assessment Agency. The Hague <https://www.pbl.nl/sites/default/files/cms/publicaties/PBL-2016-Cities-in-Europe-2469.pdf>.
- Pocius, A., Gruževskis, B. (2016). Demografinių pokyčių ypatumai šalies didžiuosiuose miestuose. *Lietuvos socialinė raida: teritorinis aspektas*, Nr. 5, p. 25–43.
- Robinson, J., Scott, A. J., Taylor, P. J. (2016). Working, Housing: Urbanizing. *The International Year of Global Understanding – IYGU*, Springer. <https://link.springer.com/content/pdf/10.1007%2F978-3-319-45180-0.pdf>.
- Shor, M., Burneika, D. (2017). Metropolitinių Lietuvos miestų migraciniai regionai XXI amžiaus pradžioje. *Geografijos metraštis*, Nr. 50, p. 41–56. [http://www.demografija.lt/download/Shor\\_Burneika.pdf](http://www.demografija.lt/download/Shor_Burneika.pdf).
- Stanaitis, S., Česnavičius, D. (2010). Dynamics of national composition of Vilnius population in the second half of the 20th century. *Bulletin of Geography. Socio-economic series*, No. 13, p. 33–43. Warsaw: Versita.
- Steinfuhrer, A., Haase, A. (2008). Urban Shrinkage in East Central Europe? Benefits and Limits of a Cross. *Declining cities, developing cities: Polish and German perspectives*, p. 77–99. [http://pts.amu.edu.pl/en/pliki/menu/Grossmann\\_et\\_al.pdf](http://pts.amu.edu.pl/en/pliki/menu/Grossmann_et_al.pdf).

- SveNAS-Sveikatos netolygumų atvaizdavimo sistema.* (2016). <http://www.svenas.lt/>.
- Ubarevičienė, R. (2016). Lietuvos gyventojų vidaus migracijų teoriniai ypatumai XXI a. *Lietuvos socialinė raida: teritorinis aspektas*, Nr. 5, p. 9–24. [https://lsc.lt/download/Lietuvos\\_socialine\\_raida\\_2016\\_visas.pdf](https://lsc.lt/download/Lietuvos_socialine_raida_2016_visas.pdf).
- Užimtumo tarnyba prie Socialinės apsaugos ir darbo ministerijos.* (2019). <https://uzt.lt/darbo-rinka/>
- Vaitekūnas, S. (2004). Gyventojų tankumas ir koncentracija. *Tiltai*, Nr. 4, p. 21–38.
- Wittwer, R., Hubrich, S. (2016). What happens underneath the surface? Evidence and insights into changes in urban travel behaviour in Germany. *Transportation Research Procedia*, No. 14, p. 4304–4313. <https://www.sciencedirect.com/science/article/pii/S2352146516303581>.

## DEMOGRAFINIAI IR SOCIALINIAI POKYČIAI KLAIPĖDOS PRIEMIESČIUOSE 2010–2017 M.

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Santrauka

Tyrimas atskleidžia gyventojų migracijos į Klaipėdos priemiesčius procesą mažiausių administracinių vienetų – seniūnijų – lygiu. Tai padeda gana tiksliai nustatyti ne tik patraukliausias priemiesčių gyvenamąsias vietas, bet ir socialines-demografines problemas, su kuriomis susiduria vietos gyventojai.

Klaipėdos priemiesčių gyventojų skaičius didėja, 2010–2017 m. tiriamose seniūnijose jis išaugo 7 %. Sparčiausiai auga Sendvario, Dauparų-Kvietinių, Dvilų seniūnijos. Teigiamas gyventojų skaičiaus pokytis yra ir Priekulės bei Kretingalės seniūnijose. Visos jos ribojasi su Klaipėdos miesto teritorija, yra gyventojams patraukliausios zonos dėl nedidelio atstumo nuo miesto ir patogaus susisiekimo. Tuo tarpu toliau nuo miesto esančiose seniūnijose gyventojų skaičius sparčiai mažėja.

Socialinių paslaugų poreikį lemiantys veiksniai: visuomenės senėjimas, negalia, emigracija, socialinė rizika ir nedarbas. Viena aštriausių socialinių problemų – nedarbo lygis. Didžiausias nedarbo lygio rodiklis yra labiausiai nutolusioje nuo Klaipėdos miesto Judrėnų seniūnijoje (8,54 %), taip pat Sendvario (6,72 %) ir Priekulės (7,13 %) seniūnijose. Pastarojoje bendrą nedarbo lygį kelia Derceklių gyvenvietės, kurioje įsikūrusi Dituvo sodų bendrija, aukštas nedarbo lygio rodiklis. Be to, nemažai Sendvario gyventojų yra registruoti Klaipėdoje, kad vaikai gautų vietą miesto ugdymo įstaigose. Tuo tarpu dėl palankios Kretingos ir „Žalgirio“ seniūnijų geografinės padėties, nedarbo lygis jose žemiausias (atitinkamai 3,71 % ir 3,97 %). Ypač jis sumažėja vasaros sezono metu.

Vertinant Klaipėdos priemiesčių vystymo perspektyvas, Judrėnų, Endriejavo, Veiviržėnų ir Kretingos seniūnijose reikėtų skatinti ekonominių veiklų įvairovę, didinti jų efektyvumą. Tai galima įgyvendinti skatinant ūkininkus investuoti ir plėtoti žemės ūkio veiklą. Sukūrus naujas darbo vietas, mažėtų nedarbo lygis, atvyktų daugiau jaunų šeimų, augtų socialinės infrastruktūros, paslaugų (švietimo, medicinos) poreikis. Sendvario seniūnijoje didėjant jaunų gyventojų skaičiui, reikėtų skirti lėšų naujoms ugdymo įstaigoms statyti. Kretingalės, Dauparų-Kvietinių ir Dvilų seniūnijose būtina spręsti socialinės ir inžinerinės infrastruktūros objektų trūkumo problemas.

PAGRINDINIAI ŽODŽIAI: *priemiesčiai, seniūnijos, Klaipėda, demografiniai ir socialiniai pokyčiai.*

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